

Reference 60
 U.S. ENVIRONMENTAL PROTECTION AGENCY
 POLLUTION/SITUATION REPORT
 Bautsch Gray Mine Site - Removal Polrep



US EPA RECORDS CENTER REGION 5



429821

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: **POLREP #14**
 Bautsch Gray Mine Site
 B5TS
 Jo Daviess County, IL
 Latitude: 42.3574200 Longitude: -90.3985700

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Date: 8/29/2011

Reporting Period: 8/19/2011 to 8/29/2011

1. Introduction

1.1 Background

Site Number:	B5TS	Contract Number:	EP-S5-08-04
D.O. Number:		Action Memo Date:	5/17/2010
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	NA
Mobilization Date:	9/9/2010	Start Date:	9/9/2010
Demob Date:		Completion Date:	
CERCLIS ID:	TBD	RCRIS ID:	TBD
ERNS No.:	NA	State Notification:	Yes
FPN#:	NA	Reimbursable Account #:	NA

1.1.1 Incident Category

Time-Critical Removal Action

1.1.2 Site Description

The approximately 80-acre area of contamination is composed of the remnants of a former lead and zinc mining operation and two residential properties. The main tailings pile area is approximately 55-acres in size and is located on the east side of Blackjack Road. Road ditch areas along Blackjack Road have also been impacted by the contaminated mine tailings as well as residential property. The Bautsch Gray Mine Site is being proposed for the National Priorities List (NPL).

1.1.2.1 Location

The Site is about 4 miles south of Galena, in Jo Daviess County, Illinois. The Site is located in a rural agricultural and residential area and is bordered to the north, south, and east by residential properties and agricultural land, and to the west by Blackjack Road and residential areas. The tailings have been migrating onto the two residential properties to the west of Blackjack Road. The geographical coordinates for the Site are Latitude 42.3574200 and Longitude -90.3985700.

1.1.2.2 Description of Threat

The Site is composed of the remnants of a former lead and zinc mining operation dating back to the early 1900's. Elevated levels of lead and arsenic have been detected in soil and tailings on and around the site. Elevated levels of lead have been found in a residential well adjacent to the site. Also elevated lead levels have been found in drainage ditches along Blackjack Road as well as in nearby Smallpox Creek.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

During the week of October 6 through 8, 2009, U.S. EPA and the START contractor conducted a site assessment (SA) at the Bautsch Gray Site. In summary, U.S. EPA collected 36 surface soil samples and field screened Site soils with an x-ray fluorescence (XRF) instrument (InnovX). Residential well and surface water samples were also taken. Lead and arsenic results exceeding the action levels and cleanup levels were found around the mine tailings pile, in and around the road ditches along Blackjack Rd. and on adjacent residential areas.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Work on storm water retention ponds 1, 2, 5 & 6 have been completed. Pond 6 is a small pond located where the red gate entrance road was previously located. The Pond 6 berm was constructed on the site access road to channel water away from the 746 S. Blackjack Rd property during heavy rains. Ponds 3 & 4 were damaged during the July 27 flood and were not rebuilt. Ponds 1 & 2 were redesigned to increase their capacity after the July 27 flood. Also, the 18 inch drainage culvert under Blackjack Rd that was temporary sealed in the Fall of 2010 was opened to channel water under the road to reduce water pooling in the east road ditch. A wire fence has been installed around the west edge of Pond #1 to restrict access. In addition, "No Trespassing" signs have been posted around the site. The storm water retention ponds and drainage structures continue to be designed and constructed for a 100-year storm event.

Soil cleanup work has been completed on the 746 S. Blackjack Rd property to removing tailing and contaminated soil. The top layer of soil and vegetation in some areas was impacted by contaminated tailings during the July 27-28 storm. The material was loaded into dump trucks and transported back across Blackjack Rd to the tailings pile on site. This work on the 746 S. Blackjack Rd property has been completed with the exception of final landscaping, which is scheduled to be completed in September 2011.

During September grass seeding of the large berm and road ditch along Blackjack Rd. will be completed.

2.1.2 Response Actions to Date

Prior to the July 27-28 storm, construction of Retention Pond #1 was nearing completion. Ponds #2-4 were complete. Pond #5 and the up gradient diversion ditch were also complete and remain structurally sound and are functioning properly after the storm. The storm has resulted in a review of the design and work to be performed at the site. With Ponds #3 & 4 no longer functional, Ponds #1 & 2 have been enlarged to increase their surge capacity. The storm water model has been re-run on Ponds #1 & 2 to ensure that the overall design meets the 100-year rainfall criteria. Additional modeling will be conducted. The storm also resulted in some minor offsite migration of tailings into the 746 S. Blackjack Rd property. This material was removed and final restoration on this residential property is planned for September 2011.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

The PRPs for the site have installed a reverse osmosis (RO) drinking water filtration system at the home at 746 S. Blackjack Rd. under an Administrative Order by Consent (AOC). Filter installation on the private well was performed in July 2010, and operation and maintenance by the PRPs will continue for two years. Sampling for lead, arsenic, and copper has indicated levels below the drinking water standards (MCLs). The pH levels of the water appear to be lower than normal (pH 5.2). Some modifications to the system may be required during 2011.

2.1.4 Progress Metrics

Work on this phase of the project has been completed and all personnel and equipment are being demobilized from the Site this week. Additional landscaping work will be completed on the 746 S. Blackjack Rd. property in September 2011 to restore the grass and lawn. Grass will also be planted on the berms and road ditch along the east side of Blackjack Rd to stabilize the slope.

The July 27 storm and extremely heavy rainfall that occurred at the site has resulted in an estimated two week delay of completion of this phase of the site work.

2.2 Planning Section

2.2.1 Anticipated Activities

The objective of this removal action is to stabilize the mine tailings pile to prevent the off-site migration of lead and arsenic contaminated tailings onto Blackjack Road and adjacent residential property by diverting clean up-gradient storm water around the tailing pile and by constructing retention ponds on the tailings area to reduce the velocity and volume of water moving through the site during large storm events. The ponds and drainage structures are being designed for a 100-year storm event.

2.2.1.1 Planned Response Activities

Landscape restoration work (grading and seeding) on site and on the 746 property will be completed by September 2011. In addition, the large roadway berm along Blackjack Rd. will be seeded to establish grass to prevent erosion.

2.2.1.2 Next Steps

Research on remediation options for the 798 S. Blackjack residential property (Horseshoe-Shaped Tailings Deposition Area) is ongoing. Stabilizing this area with vegetation has been identified as an alternative to excavation and removal of the tailings. The EPA Environmental Response Team (ERT) is assisting with developing a remediation plan for this area. ERT has completed a bench scale study that has determined that amending the mine tailings with 10% municipal sludge will support plant growth. Sources of municipal sludge have been identified and this phase of the project will be conducted in Spring 2012 pending the availability of funding. Also, in Spring 2012 the final road ditch cleanup will be conducted along portions of Blackjack road.

2.2.2 Issues

The Bautsch Gray Mine Site is being scored for the NPL. The scoring package is currently being reviewed and finalized.

As a result of the historic 1000-yr rainfall resulting from the July 27-28 storm, the storm water

model has been re-run based on the current site configuration. The final design will continue to be to the 100-year storm criteria.

Work on the 798 S. Blackjack residential property (Horseshoe-Shaped Tailings Deposition Area) will not begin until spring 2012.

2.3 Logistics Section

Not applicable.

2.4 Finance Section**Estimated Costs ***

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$2,275,000.00	\$2,136,739.00	\$138,261.00	6.08%
START	\$296,000.00	\$264,000.00	\$32,000.00	10.81%
Intramural Costs				
Total Site Costs	\$2,571,000.00	\$2,400,739.00	\$170,261.00	6.62%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Safety Officer

Site safety for the project has been good.

Air sampling was completed and results showed non-detections for lead and arsenic. Air monitoring has been conducted during all on-site work days.

2.6 Liaison Officer

Not applicable.

2.7 Information Officer

The public meeting will be rescheduled for fall 2011.

3. Participating Entities

3.1 Unified Command

Not applicable.

3.2 Cooperating and Assisting Agencies

Illinois Environmental Protection Agency (ILEPA)

Jo Daviess County

Agency for Toxic Substances and Disease Registry (ATSDR)

4. Personnel On Site

1 EPA OSC

5-10 ERRS – LATA/Kemron and CMC

1 START – Weston Solutions

1 site security (after-hours)

5. Definition of Terms

ERRS – Emergency and Rapid Response Services

FOH – Federal Occupational Health

ILEPA – Illinois Environmental Protection Agency

NPL – National Priorities List (U.S. EPA)

OSC – On-Scene Coordinator

RCRA – Resource Conservation and Recovery Act

START – Superfund Technical Assessment and Response Team

U.S. EPA – United States Environmental Protection Agency

6. Additional sources of information

6.1 Internet location of additional information/reports

For additional information, please refer to www.epaosc.org/bautschgraymine.

6.2 Reporting Schedule

The next POLREP will be submitted in Spring 2012 or earlier if necessary.

7. Situational Reference Materials

For additional information, please refer to www.epaosc.org/bautschgraymine